Yukon

AGRICULTURE

STATE OF THE INDUSTRY

2000 – 2001

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YUKON AGRICULTURE

STATE OF THE INDUSTRY, 2000-2001

Department of Energy, Mines and Resources, Government of Yukon
Agriculture and Agri-Food Canada - Research Branch

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List of acronyms

AAFC	Agriculture and Agri-Food Canada
ALARC	Agricultural Land Application Review Committee
APAC	Agriculture Planning and Advisory Committee
APF	Agriculture Policy Framework
ATS	Agri-Food Trade Service
CARD	Canadian Adaptation and Rural Development
CFIA	Canadian Food Inspection Agency
CPS	Canada Plans Service
CRP	Canadian Rural Partnership
CWD	Chronic Wasting Disease
DFAIT	Department of Foreign Affairs and International Trade
EIA	Equine Infectious Anemia
EGGD	effective growing degree days
ETTF	Education and Training Trust Fund
FTLAC	Federal-Territorial Land Advisory Committee
GDD	growing degree day
GGAY	Game Growers Association of Yukon
IRT	infrared transmissive mulch
LARC	Land Application Review Committee
MISB	Market and Industry Services Branch
MYDP	Multi-year Development Plan
PFRA	Prairie Farm Rehabilitation Administration
RTY	Rural Team Yukon
YAA	Yukon Agricultural Association
YuWIN	Yukon Work Information Network

INTRODUCTION

This report provides a description of agricultural programs, services and policies administered by the governments of Yukon and Canada, as well as a summary of initiatives taken by the private and non-government sectors. The target readership includes farmers, agricultural land applicants, other government departments, the general public, and non-government organizations such as the Yukon Agricultural Association (YAA).

This report summarizes the agricultural sector's activities and developments during the 2000 and 2001 calendar years, with a particular emphasis on the results of the 2001 census of agriculture that took place on May 15, 2001.

INDUSTRY HIGHLIGHTS FOR 2000-2001

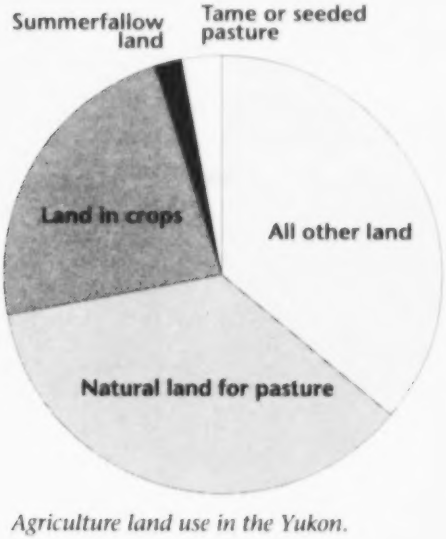
- A multi-year development plan for the industry was completed for the industry in February 2000.
- In June 2001, the Yukon hosted the annual meeting of provincial, territorial and federal agriculture ministers for the first time.
- In June 2001, the Yukon signed a Risk Management Agreement with Canada that enabled federal/territorial funds to flow to the agricultural industry for forage crop losses suffered in the 2000 crop year.

Loading round bales at a Takhini valley farm.

- The Yukon received Canadian Farm Business Management Council funding in 2001.
- Twenty new agricultural titles were issued, expanding the agricultural land base by 568.5 hectares.
- Agricultural lands were released by lottery in the Watson Lake area.
- Seven delegates represented the Yukon at the 4th Circumpolar Agricultural Conference in Iceland.
- An agriculture census, which was carried out in May 2001, indicated that farm numbers, level of investment, and value of production had all increased.

The 2001 Canada census of agriculture reported that the Yukon farm sector is healthy and growing and now supports 170 farms with the average farm size increasing from 55 hectares in 1996 to just under 70 hectares in 2001. Land use practices are changing as well, with a 23 per cent increase in land in crops and a 72 per cent increase in natural land used for pasture on Yukon farms over the past five years. Contrary to the national trend, which saw a 25 per cent decline in summerfallow practices, Yukon farms saw a 107 per cent increase in this practice from 1996. Approximately 60 per cent of the 11,800 hectares devoted to farmland are in production or under development.*

*Yukon Bureau of Statistics Information Sheet #C01-02



Agriculture land use in the Yukon.

Oat bundle on the field.

THE AGRICULTURAL LAND BASE

A BRIEF DESCRIPTION OF YUKON GEOGRAPHY, CLIMATE AND SOIL

Less than two per cent of the Yukon's 483,450 square kilometres is suitable for agricultural development because of limitations of geography, climate and soils.

The Yukon is part of the Canadian Cordilleran region, which is characterized by mountainous terrain and the presence of glaciers and icefields in some areas. Soil-based agriculture is limited to major river valleys including those of the Yukon, Takhini, Pelly, Stewart and Liard. For the most part, agricultural activity is located on river sediments. In the Takhini and Dezadeash valleys, typical agricultural soils are formed on silts and clays deposited by Glacial Lake Champagne.

The Yukon has a sub-arctic continental climate with temperatures reaching as high as 30°C in the summer and as low as -50°C in the winter. The average frost-free period ranges from 93 days in the Watson Lake area to 21 days at Haines Junction. Frost-free periods also vary substantially from year to year at any location. Long hours of daylight during the summer, which promote rapid growth, compensate, to some extent, for the cooler summer temperatures experienced north of 60° latitude.

Average annual precipitation ranges from about 20 centimetres west of Whitehorse to more than 40 centimetres in Watson Lake. The southwest Yukon, where most agricultural production occurs, lies within the rain shadow created by the St. Elias

Farming the soils left by Glacial Lake Champagne.

and Coastal mountains. Southwest Yukon is subject to droughts between April and July, which often delays crop germination.

Yukon soils are generally deficient in nitrogen and phosphorous. Potassium and sulphur abundance is often dependent on local geology and is difficult to predict. Since 1984, more than half of the soils tested by the Yukon Agriculture Branch have been deficient in potassium. The most common micronutrient deficiencies are boron and magnesium. Soils throughout the Yukon are low in organic matter, and salinity has been identified as a problem in localized areas. Permafrost is found throughout the Yukon, varying from sporadic discontinuous in southern agricultural areas, and increasing to extensive discontinuous at the northern extreme of agricultural activity in the territory.

YUKON AGRICULTURAL AREAS

The total amount of land disposed of through the Yukon agricultural land program is approximately 12,370 hectares. This is slightly higher than the census figures because not every farm was producing during the census. This land is utilized in the following ways: approximately 23 per cent is in crops; two per cent is in summerfallow; 39 per cent is in pasture; and the remaining 36 per cent is used for other purposes. All of the land released to date represents less than one-half of one per cent of the land base of the Yukon.

Most of the land used for agricultural purposes in the Yukon is located near the major communities. Seventy per cent of the Yukon's farms are located within 100 kilometres of Whitehorse. The Takhini valley agricultural area west of Whitehorse is the largest agricultural area in the territory. Smaller agricultural areas are also found near Dawson City, Watson Lake and Mayo.

OBTAINING CROWN LAND FOR AGRICULTURAL USE

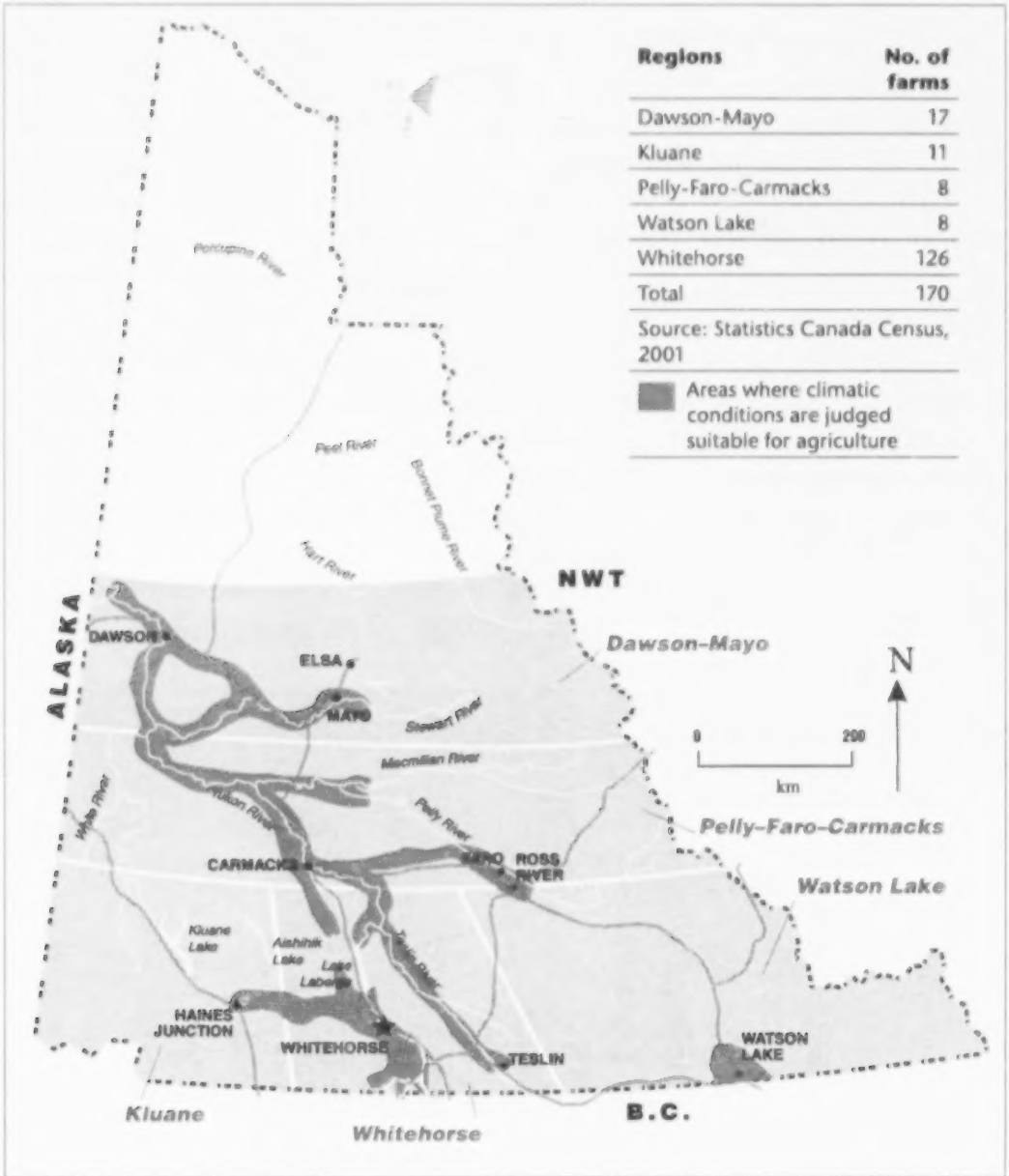
Obtaining Crown land for agricultural use is explained in the document *Agriculture for the 90s: A Yukon Policy*. The Yukon is one of the few places in Canada where Crown land can be obtained for agricultural purposes. To qualify for Crown land, an applicant must be a Canadian citizen or permanent resident of Canada, must be at least 19 years of age, and must have lived in the Yukon for at least one year.

The process begins with an application to the Agriculture Branch of the department of Energy, Mines and Resources. The application must describe the intended uses of the land, and the applicant must certify that an acceptable farm development plan will be submitted within 60 days. Applicants must also declare that they will retain their Yukon residency for the duration of any agricultural land Agreement for Sale that may result.

Preliminary reviews of the application are conducted by the agriculture and the lands branches of the department of Energy, Mines and Resources, Department

of Indian and Northern Affairs and other government review agencies. Conflicts with land use regulations, other land interests and applications, or First Nations settlement land will be identified. The Agriculture Branch provides an evaluation of site suitability and arability.

The Agriculture Branch also assists the applicant in conducting an agricultural management review and completing a farm development plan for the application area. At the same time, the Department of the Environment examines potential conflicts with fisheries, habitat, wildlife, and environmental and recreational



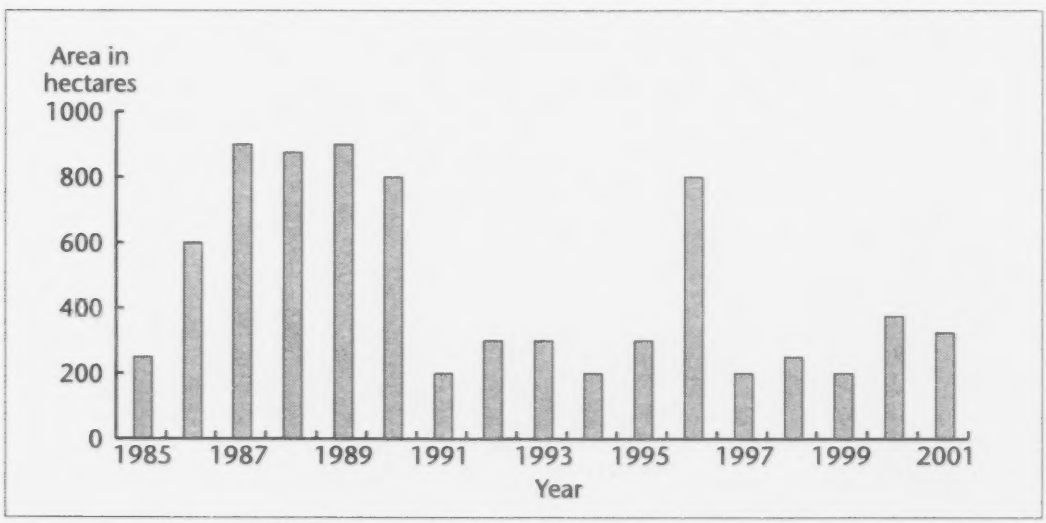
Location of Yukon agricultural areas.

values. Once these reviews have been completed, recommendations are prepared for consideration by the Agricultural Land Application Review Committee (ALARC).

If an application on Commissioner's land receives a favourable review from ALARC, it is forwarded to the Land Application Review Committee (LARC) and affected First Nations. First Nations are affected when an application falls within their traditional territory. Applications are advertised in local newspapers to notify the public so that they may make comment. Following consultation with the First Nation, and the public, and a favourable recommendation from LARC, an Agreement for Sale may be prepared setting out the terms and conditions which must be met in order for the applicant to obtain title to the land.

If the application involves federal Crown land, rather than Commissioner's land, it must be approved by the Federal-Territorial Land Advisory Committee (FTLAC). Finally, the federal Cabinet must approve an Order-in-Council, transferring the land to the Commissioner for subsequent disposition to the applicant. The federal Order-in-Council will no longer be required after April 1, 2003, the scheduled date for devolution of federal land responsibilities to the Yukon.

The land is released to the applicant under an Agreement for Sale with an attached value. The agreement holder is required to meet all the conditions of the Agreement for Sale, including development of the property. Under the provisions of the Yukon agriculture policy, for every two dollars of approved development work completed by the applicant, one dollar may be forgiven. The total expenditure on approved agriculture developments must equal twice the appraised market value after any development costs incurred by the Government of Yukon are substracted. Development costs will be paid to the Government of Yukon in cash. If the applicant has met all the obligations of the Agreement for Sale within five years, the agreement can be considered completed, and title can be issued.



Area of agreements for sale released 1985-2001.

AGRICULTURAL LAND APPLICATIONS IN 2000-2001

In 2000, 18 agricultural land applications were submitted. Four of these applications were rejected by the Yukon government, and five were cancelled by the applicants' voluntary withdrawal. The other nine are still in the review process. Seven of these have received approval, pending survey and disposition. Twelve Agreements for Sale, totalling 377.11 hectares and eight agricultural titles, totalling 241 hectares were issued.

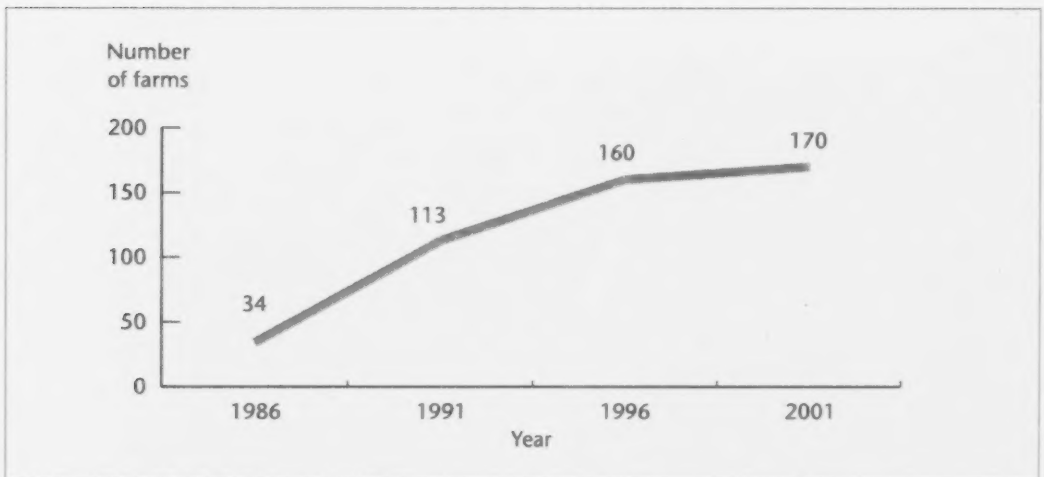
In 2001, 13 agricultural land applications were submitted. Two of these applications won the lots at Upper Liard that were offered in the third public agricultural land lottery. Seven land applications were rejected, and four applications are in the review process. Twelve Agreements for Sale totalling 291.49 hectares and eleven titles, totalling 327.5 hectares, were issued.

There are currently 101 land applications in process. Forty-four are under active consideration, 24 are on hold, and 33 are waiting for Orders-in-Council or devolution to transfer them to the Government of Yukon. Most applications that are on hold require prior commitments to be completed, or are delayed due to land claims, land planning processes or policy constraints.

AGRICULTURAL LAND PLANNING

The 1991 agriculture policy places an emphasis on the release of agricultural land through planned agricultural developments. Planned development is preferred because it:

- provides for coordinated use of infrastructure such as roads and hydro;
- places less demand on services such as school bussing;
- allows for the orderly planning of future services; and



Growth in the number of farms in the Yukon.

- allows agriculture to be developed in accordance with regional and sub-regional plans where they exist.

To date, 11 lots have been released in three lotteries. At this time a single lot in the Sunnydale area of Dawson City — 60 hectares — is ready for sale and will be sold by lottery sometime during the winter of 2002.

A fully cost-recoverable budget was established for Energy, Mines and Resources' Agriculture Branch in August 1999 to facilitate agricultural land planning. This allows basic infrastructure (roads and power) to be established prior to land sales.

The public, municipalities and First Nations will continue to be part of the planning process for planned agricultural areas. Background work is being carried out for further planned agricultural areas in several different locations.

- A public working group established in the Haines Junction area has developed principles and guidelines for agricultural land development in the Kluane Land Use Planning Area, and has proposed candidate areas for development, subject to the collection of technical information. Approximately 1,500 hectares has been approved for agriculture and rural residential development based on the recommendations of the Kluane Working Group report. One thousand hectares of the 1,500 approved hectares are suitable for soil-based agriculture.

Grain storage bins on a farm beside the Yukon River.

Cattle grazing at the Pelly River farm.

- The Ibex Hamlet Local Area Plan has designated several hundred hectares for future agricultural development. These parcels will be proposed for development following the devolution of federal responsibilities on April 1, 2003.
- A resource plan has identified agricultural potential on a number of sites in the Mayo and Stewart valley area that may be used for future agricultural land offerings.

GRAZING PROGRAM

To meet the grazing needs of Yukon livestock owners, the Government of Yukon grants grazing rights on designated areas of public land to eligible applicants. Grazing rights are given to the applicant in the form of a grazing agreement.

Applications for grazing agreements are submitted to the Agriculture Branch where they are initially screened for conflicts with wildlife, existing land and resource uses, other land applications and aboriginal claims. The Agriculture Branch inspects the application area and assesses its suitability for grazing by determining the grazing capacity.

All grazing applications are reviewed by the Agricultural Land Application Review Committee (ALARC). If ALARC recommends approval of the application, and the proposed grazing area is on federal land, the application is reviewed by the Federal Territorial Land Advisory Committee. If the proposed grazing area is on territorial land, the application is reviewed by the Land Application Review Committee.

If no major conflicts are identified through the review process and there is adequate graze, a grazing agreement can be issued.

For each grazing agreement, the Agriculture Branch prepares a grazing management plan, which outlines management practices required for sustained grazing. Agriculture Branch personnel monitor grazing agreements throughout the tenure of the agreement. During 2000 and 2001, the Agriculture Branch took an aggressive inspection role to ensure that grazing rights holders complied with the conditions of their grazing management plans.

Summary of grazing program activities during 2000 and 2001.

Number of...	**2000**	**2001**
grazing agreements in place	35	34
hectares under grazing agreement	9,499	9,363
Animal Unit Months* under grazing agreement	1,689	1,694
grazing applications in the review process	16	15
hectares under grazing application	7,542	6,990
grazing applications received	0	2
grazing applications approved**	2	1

*Animal Unit Months (AUM) is the amount of forage consumed by an adult cow or horse in one month.
**Not all grazing applications are approved int he year that they are received.

During 2000 and 2001, work continued on revisions to the grazing policy. Completion of the new grazing policy has been delayed pending the outcome of Government of Yukon renewal and devolution.

PRODUCTION

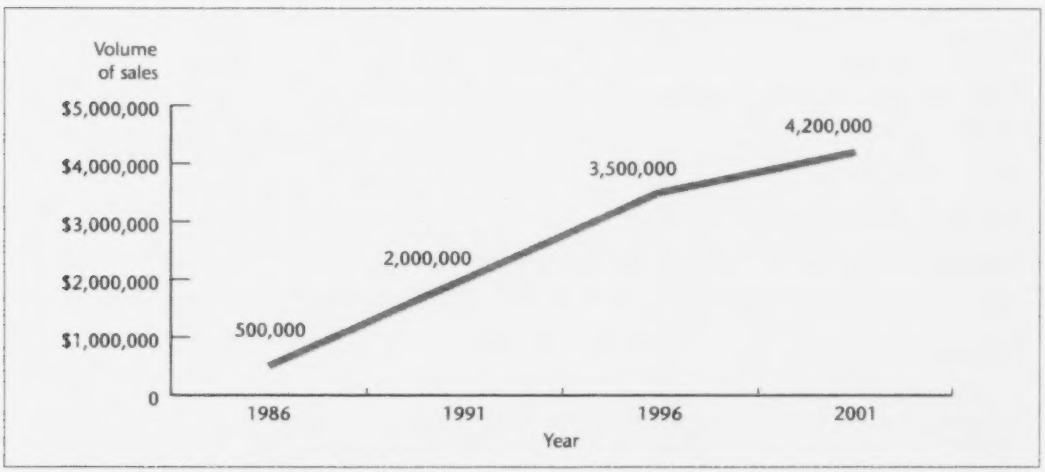
OVERVIEW

Overall production of agricultural goods is increasing in the Yukon. This is shown by figures compiled in the Statistics Canada agriculture census reports of 1986, 1991, 1996 and 2001. The results of the 2001 census continued in this trend with the number of farms, total production, and capital investment all increasing significantly since 1996. Considering that the census took place following the 2000 crop year, where close to half of the forage harvest was lost to heavy rains, it was encouraging to see that gross farm receipts were also up by 18 per cent over 1996 figures.

The number of farms in the Yukon increased from 160 in 1996 to 170 in 2001. Value of production climbed from just over $3.5 million to just under $4.2 million. There was a reported $50.2 million invested in land, buildings and equipment in 2001. This is over 10 times the total investment reported in 1986.

The production of forages (hay) continues to lead the development of agricultural land, accounting for 5,323 acres of the 7,015 acres of field crops grown in 2001. The amount of new land titled for agriculture in 2000 and 2001 was 1,405 acres. This increased the total area of farms in the Yukon to 29,318 acres (11,865 hectares).

According to the 2001 census, there are now 213 tractors, 53 mower conditioners, 57 balers and 9 combines operating in the Yukon. Most of this equipment has been purchased from northern British Columbia or Alberta. Several private sector businesses have also been created to service, repair and transport farm equipment. It is also possible to contract the services of custom machine operators or the services of contractors to clear land, develop fields, and seed and harvest farmland. In 2001, the total value of custom and contract services was $668,134.



Growth of the value of sales in the Yukon.

2001 Statistics Canada census of agriculture figures relating to Yukon farm production.

Value of farming	
Total farm capital	$50,206,295
Total gross farm receipts	$4,194,864
Value of all farm machinery and equipment	$7,972,408
Value of land and buildings owned	$37,256,090
Value of livestock and poultry	$2,251,767
Field crops	
Total area of field crops*	7,015 acres*
Tame hay	4,686 acres
Alfalfa and alfalfa mixtures	637 acres
Oats	1,293 acres
Potatoes	30 acres
Vegetables for sale	24 acres
Berries for sale	4.4 acres
Greenhouse production	
Number of greenhouses producing commercial crops	29
Total area of greenhouses	53,700 square feet*
Flowers	30,850 square feet
Vegetables	20,916 square feet
Other greenhouse products	1,934 square feet
Livestock and poultry	
Total hens and chickens	9,319
Broilers	2,154
Layers	6,612
Turkeys	294
Cattle	192
Pigs	73
Horses (on farms)	818
Elk	108
Sled dogs for breeding**	334
Colonies of bees	35
Total area of farms	29,318 acres
Total number of farms	170

* Statistics Canada reports in square feet and acres
** The definition of an agricultural operation was expanded in 1991 in the Yukon and Northwest Territories to include herding wild animals (such as caribou and muskox), breeding sled dogs and harvesting indigenous plants and berries

GROWING SEASON CONDITIONS – 2000 AND 2001

Local weather data is recorded at the Takhini Forestry Farm Demonstration Site located in the Takhini River watershed, a few kilometres northwest of Whitehorse. The 2000 growing season growing degree day (GDD) value was the lowest in the five years on record (see table below).

Summary weather data from the Takhini test plots (1997-2001)

	1997	1998	1999	2000	2001
Growing degree days (GDD) (>5°C)	763.2	823.8	811.1	664.7	709.9
Effective growing degree days (EGDD)* (>5°C)	900.6	972.1	957.1	784.4	837.7
Frost-free period (0°C)	45 days	35 days	50 days	50 days	51 days
Killing frost-free period (-2.2°C)	74 days	81 days	85 days	68 days	77 days
Precipitation (mm)	124.8	57.4	144.6	179.8	158.7

*The temperature factor is adjusted upward by 18% to account for the boost plants receive from the long hours of daylight north of 60° latitude.

2000 weather summary

Spring and summer temperatures were below normal for the southern Yukon. The Takhini valley received a record 179.8 millimetres of precipitation, well above the 115-millimetre 30-year average. It was a difficult year for grain and forage producers because heavy rains in August created saturated conditions and great difficulty in drying crops. Temperatures from May to August were below the 30-year normal. August was fully two degrees below the norm.

The agroclimatic rating for the 2000 growing season at the Takhini test plots was Class 5 (700-900 EGDD) which is one class too low for the maturation of oats, barley and rye. The test plots received a phenomenal 98.8 millimetres of precipitation in August. This is 60 millimetres over normal. The long killing frost-free period and the high precipitation during this growing season allowed for the development of a bumper crop of potatoes.

2001 weather summary

Spring temperatures in the southern Yukon started off cooler than usual, but as summer unfolded temperatures matched 30-year normals. The soil moisture from the previous year combined with the good weather in 2001 provided good growing conditions.

Temperatures in August were above normal, contributing to good drying conditions. The Takhini test plots recorded 837.7 effective growing degree days. Similar to 2000,

the agroclimatic rating for the site was Class 5 (700-900 EGDD). The 30-year mean for this site is Class 5 (700-900 EGDD), which is considered the limit of arable agriculture and only suitable for forages and cold hardy crops. Precipitation was higher than normal, but was below the 2000 levels.

Summary of frost-free period (0°C) at the Takhini Forestry Farm (1988-2001).

Year	Last frost	First frost	Frost free days*
1988	June 27	July 21	26 days
1989	June 21	August 10	50 days
1990	June 20	July 14	24 days
1991	June 17	August 5	49 days
1992	June 25	August 20	55 days
1993	June 19	August 19	61 days
1994	—	—	—
1995	June 1	July 15	44 days
1996	July 10	August 5	25 days
1997	June 30	August 15	45 days
1998	June 13	July 17	35 days
1999	June 8	July 28	50 days
2000	June 22	August 10	50 days
2001	June 27	August 17	51 days

*Whitehorse airport records a 30-year mean frost-free period of 87 days. This is substantially longer than that recorded at the Takhini Forestry Farm. The airport receives winds which tend to keep temperatures above freezing. The forested nature of the Takhini valley site reduces air movement and makes frost more common.

PRODUCTION SECTORS

Livestock

• Cattle, hogs and horses

After several years of slow and steady growth, the livestock sector reported a decline since the 1996 census. The 2001 census indicates that there were 192 cattle, 73 hogs and 818 horses in the territory. The census cattle numbers are likely accurate, however the census has probably underestimated the number of hogs and horses.

In the past two to three years, a significant number of hogs have been raised on hobby farms, and these were not counted in the census. The number of hogs is probably close to the long term average of 300 head.

Horse numbers in the territory have remained fairly stable over the past five years. It is estimated that there are 2,500 horses in the territory. Approximately 800 of these horses are found on Yukon farms and were counted in the 2001 census. The remainder are owned by hobby operations, outfitters and equestrians and were not counted in the census. The Agriculture Branch, working with the Bureau of Statistics, will be carrying out a survey in late 2002 to determine horse numbers, horse feeding patterns and Equine Infectious Anemia (EIA) concerns in the territory. This will provide an accurate reflection of the horse sector in the Yukon.

Spring musk ox calves at the Yukon Game Farm.

• Game-farmed animals (elk, wood bison, musk ox)

Game farming in the Yukon continues to grow slowly and sporadically. Elk are the main game-farmed animals in the territory. During the late 1990s, the number of elk increased significantly, with 150 head now on Yukon game farms. Elk products have contributed significantly to the growth of this sector in the territory. Yukon elk breeding stock and antler velvet are considered among the best in Canada.

Wood bison are also part of the game farming sector. There is one bison operation in the Yukon producing top quality breeding stock.

The Yukon Game Farm has a small herd of musk oxen.

• Reindeer

There is one reindeer operation in the Yukon continuing to produce quality animals.

• Llamas

This exotic domestic livestock sector started to develop in the mid-1990s, but has remained static over the past few years. There is interest in this species for breeding stock and pack animals. Llamas are well suited to Yukon conditions and are relatively easy to manage. There are approximately 22 head in the territory.

Poultry

• Chickens

In the Yukon, chicken production has been growing steadily since the last census in 1996, reaching 9,300 birds in 2001. In 2000 and 2001, the number of chickens raised for meat increased because of the operation of the Partridge Creek abattoir. Birds were slaughtered monthly at the abattoir and sold mostly through private orders. Yukoners consume over 500,000 birds per year, therefore there is a significant opportunity for growth in this sector.

• Layers/egg production

This sector continues to expand. It is estimated that 105,000 dozen eggs are now produced annually, which meet approximately 20 per cent of the Yukon's consumption requirements. This sector will continue to expand because growth opportunities remain. A considerable number of small laying flocks are kept for on-farm and local rural community needs.

• Turkeys

Production of turkeys remains constant with approximately 1,000 birds per annum being raised in the territory. Although the pattern of consumption is seasonal, there are opportunities for substantial expansion in the production of turkeys. One farm operation currently raises wild turkeys for meat sales.

• Other

A limited number of ducks, geese and game birds are raised in the Yukon. The growth trend is positive but limited to seasonal and niche markets.

Harvesting oats in 2001.

Bundles of oats harvested for greenfeed.

Field crops

• Grain

The production of cereal grains (barley, oats, wheat) in the Yukon is primarily limited by climatic conditions, especially the high risk of frost during the growing season. Grain production in the territory has increased modestly over the past two to three years. The next several years will see further increases in production due to the use of new, earlier maturing grain varieties, increasing accessibility to more appropriate harvesting equipment, and more on-farm grain storage infrastructure. If the livestock sector expanded, demand for locally produced feed grains would increase. Demonstration work undertaken by the Agriculture Branch has shown that it is possible to produce some cereal grains on a consistent basis. In addition, some Yukon farmers have made significant strides in producing cereal grains through innovative management techniques.

• Greenfeed

Greenfeed involves the production of oats and sometimes barley and fall rye as forage crops. For years, greenfeed production has been an important component of fodder production in the Yukon. The most common greenfeed is oats, which is usually harvested with a binder (bundles) or a baler (bales) before it matures.

Based on the latest census information, 1,300 acres of oat greenfeed and 157 acres of rye were grown. The number of acres of fodder crops such as oats and rye has decreased over the past two to three years as traditional hay production has increased.

• **Forage crops**

Tame forage production is one of the main activities in the agricultural sector in the Yukon. Forage production is focused primarily on growing bromegrass and to a lesser extent, timothy, and a legume such as alfalfa. Based on the 2001 census, forage is grown on 4,700 acres, which is an increase of 10 per cent over the 1996 census. Yukon forage producers grow a good quality product with protein levels averaging between 10 per cent and 12 per cent. There continues to be room for expansion in production since the Yukon produces only about 50 per cent to 55 per cent of its consumption requirements.

Greenhousing

Greenhousing represents the largest sector of horticultural sales in the Yukon. The 2001 census reported 29 commercial greenhouses operating in the territory. Greenhouse flowers lead production with 30,850 square feet under protective cover. Vegetable production accounted for 20,916 square feet and other production such as forestry seedlings totalled a further 1,934 square feet. Only one farm reported sales of mushrooms.

Most of the flower production in the Yukon can be attributed to spring bedding plant sales, which take place in most communities around the Yukon. Whitehorse and Dawson City contribute to most of the commercial vegetable sales, and supply rarely comes close to local demand. The most popular greenhouse vegetables are cucumbers and tomatoes although zucchini and peppers can often be found for sale. Sweet corn, squash and pumpkins are greenhouse novelties that show up at local fall fairs but are too expensive to produce commercially in the Yukon.

Maturing cucumbers grown at Yukon Gardens' greenhouses.

Vegetables and berries

According to the 2001 census, vegetable production in the Yukon has decreased by close to 25 per cent since the 1996 census, mixed vegetable production decreased to 24 acres and potato production decreased to 30 acres. The number of farms producing vegetables decreased from 30 in 1996 to 24 in 2001 and the number of farms producing potatoes decreased from 20 in 1996 to 13 in 2001. Prices for locally grown and organically produced crops continues to be high, with market demand outstripping supply, so it would be surprising to see this trend continue.

Apples grown under plastic cover in the Klondike valley.

On the other hand, the production of berries increased significantly between census reports. In 1996, there were nine farms producing a total of 4.4 acres of raspberries, strawberries and saskatoon berries. In 2001, the acreage had increased to 11 acres on 10 farms with limited expansion into apples and grapes being reported.

The Agriculture Branch conducted variety trials on strawberries and raspberries in 2000 and 2001 to determine the commercial viability of cultivars imported from the prairie provinces and Alaska. The results of these trials can be found in the annual research and demonstration reports published by the branch.

Most produce is marketed fresh through retail stores, farmer's markets and direct sales. Lack of mechanization, cold storage facilities and a permanent site for the farmer's market in Whitehorse are limiting factors in production and marketing of vegetables and berries.

Honey production

Honey produced in the Yukon is of high quality because of the wide range of wild flowers available, particularly fireweed. The level of honey production in the territory has increased in the past couple of years. The 2001 census indicated a total of 35 hives on four operations. In addition, there are also several smaller scale hobby operations that produce an excellent product, which is processed and handled in an exceptional manner.

YUKON GOVERNMENT SERVICES AND PROGRAMS

YUKON AGRICULTURE BRANCH

The Yukon Agriculture Branch was established on April 1, 1986 with a staff of one part-time and two full-time employees. With the growth of the agricultural sector over the years, the branch has grown to six permanent employees, including a director, administrative assistant, agriculture development officer, agrologist, land disposal coordinator and a land resources officer. There is also one auxiliary grazing management coordinator, one auxiliary on-call agriculture technician and one auxiliary on-call meat inspector.

Staff positions

The director is responsible for the overall management and administration of the branch. Duties include developing policy and regulations, developing and managing the budget and finances, administering lands and extension programs, supervising staff, and meeting with the public, both in the office and at their farms.

The administrative assistant's responsibilities include administrative support to the employees of the Agriculture Branch, their activities and programs, and to the Agriculture Canada office. This person greets the public when they arrive at the branch office, assisting them or referring them to the proper staff member. This person also plays an active role in planning conferences, seminars and other extension functions.

The agriculture development officer's responsibilities include inspecting lands under Agreement for Sale, on-farm extension services, coordination of livestock control

Agriculture Branch staff. (left to right) Tony Hill, Edward Lee, Dave Beckman, Patricia Smith, Matt Ball, Valerie Whelan, Mary Lynn Drul, Kevin Bowers and David Murray.

measures and pounds keepers, coordination of the Canada Plans Service (CPS) and Prairie Farm Rehabilitation Administration (PFRA) activities in the Yukon. This person also assists land applicants with the development of farm management plans and attends committee meetings addressing land-related issues.

The agrologist is responsible for the design and management of the Agriculture Branch research and demonstration program, farm production and marketing-related extension work, and publication of the branch quarterly newsletter, InFARMation, as well as yearly research reports. The agrologist also works throughout the year on educational seminars, courses and conferences for growers and producers.

The land disposal coordinator receives, processes and tracks agricultural land applications, and maintains a database of these applications.

The agriculture land resources officer evaluates planned agriculture areas for suitability and proposes sites for development. This person provides technical support to the Agriculture Land Program by evaluating agricultural capability of land applications, deals with specific land application issues on a case by case basis, as well as providing expertise in soil-related extension activities.

The grazing management coordinator develops grazing management plans for grazing leases. This person is responsible for identifying and evaluating plant species and natural vegetation communities on grazing agreement lands. This person is also responsible for range improvement programs, grazing management agreement development and administration, and related extension work.

The agriculture technician assists in research plot establishment, maintenance and harvest, as well as data collection, summarization and database compilation. This person helps in developing and implementing new research projects, and is responsible for setting up and monitoring test site weather stations. The agriculture technician also assists in writing research reports, State of the Industry reports, and the branch quarterly newsletter, InFARMation.

The meat inspector is responsible for inspecting meat and poultry at slaughter times in the abattoir. Disease and quality are checked to ensure consumer safety. The meat inspector also advises livestock producers on animal health and nutrition, and production of quality meats.

The Agriculture Branch had an operation and maintenance budget allocation of $606,000 in 1998-1999 (a seven per cent increase over 1997-1998), $620,000 in 1999-2000 (a two per cent increase over 1998-1999), and $645,000 in 2000-2001 (a four per cent increase over 1999-2000).

Approximately half of the branch's staff time was devoted to various forms of extension services and administration. About 10 per cent was dedicated to inspections and regulatory activities. An increasing proportion of time is being

allocated to agricultural land and land application issues. Staff also spent a significant amount of time on policy development, infrastructure and event planning, marketing projects, and attending Land Use Planning, Agricultural Association and Agricultural Planning and Advisory Committee meetings.

RESEARCH AND DEMONSTRATION

Forestry farm demonstration plot

The Agriculture Branch has maintained demonstration plots at the Takhini Forestry Farm since 1988. The initial thrust was to test a wide variety of crops for suitability in the Yukon. This phase complemented the Yukon Crop Development Program that ran from 1985 to 1990.

The second phase of this project saw a reduced emphasis on variety testing and more work on soil conservation techniques. Different varieties of legumes were tested for productivity and nitrogen fixing capability. A variety of green manures were tested, including field peas, lentils and oats. The results of these trials were documented in the Agriculture Branch research reports in 1990, 1991 and 1993.

In 1995, a four-year trial to increase soil organic matter and improve soil tilth was initiated at the Takhini demonstration site. A horticultural crop followed a three-field rotation of plow down crops. Records were kept of soil pH, organic matter, and economic inputs and returns so farmers could be advised on the costs associated with the program. Results were published in the annual publication, Yukon Agricultural Research and Demonstration Report (see Appendix).

Following the soil improvement program at the Takhini test site and a successful four-year grain maturity trial in the central Yukon (1995-98), the Takhini site was developed to measure grain maturity in the southern Yukon. The 2000 growing season was the second year in a four-year grain maturity trial undertaken at the Takhini Forestry Farm. The purpose of this trial was to measure the economics of production and management inputs required to mature grain in southern Yukon. A horticultural cash crop of potatoes was also grown at the Forestry Farm to test different varieties and determine profitability.

• 2000 Agriculture Branch trials

The agroclimatic rating for the 2000 growing season at the Forestry Farm was Class 5, which falls in the 30-year normal classification for this area. A total of 20 per cent fewer growing degree days were recorded for the 2000 season as compared to 1999. Temperatures were below normal and the Takhini valley received a 36 per cent increase in total precipitation. These factors resulted in a poor year for grain crop yields, but excellent horticultural crops for the cool season.

This year's horticulture cash crop consisted of Norland potatoes. The wet soil conditions were optimal for the early potato variety resulting in the most mature

and lucrative crop of potatoes grown at this site in all six years. The 2000 net return for potatoes was $14,989.92 per hectare.

The barley crop was grown for 140 days, producing a marketable harvest of 2.22 tonnes per hectare. At a local selling price of $298.00 per tonne, this produced a net loss of $27.37 per hectare.

The wheat plot produced a marketable harvest of 0.96 tonnes per hectare. At a local selling price of $310.00 per tonne, the net loss was $394.42 per hectare. The wheat harvested would barely suffice for feed — it was very poor seed quality due to the immaturity of the crop.

The oat plot was sampled on September 28 when the oat grain was in the milk to soft dough stage of maturity. This plot produced a marketable harvest of 3.36 tonnes per hectare. At a local selling price of $302.00 per tonne, the net return was $368.61 per hectare.

Cooperative small fruit trials

The summer of 2000 was the third growing season in a multi-year raspberry variety trial undertaken at a farm located on the north side of the Takhini River. The purpose of the trial is to test the commercial viability of raspberry varieties using various soil amendment techniques. Soil reaction to the various amendments was recorded together with the economic input, to provide an estimate of the commercial value of the amendments.

The winter of 1999-2000 provided an opportunity to measure raspberry variety winter hardiness under extreme conditions. With the loss of the snow cover during late December, the previous year's growth on all varieties except Kiska (see Appendix 2) was killed back to the ground. At the time of the first assessment on June 21, all varieties showed extensive suckering and re-growth from the roots. Kiska displayed 20 to 30 per cent die-back on the previous year's growth and had started to flower on the remaining portion of the live floricanes.

On August 31, the final variety assessment was conducted. Kiska displayed the most plant vigour, both in terms of plant re-growth and as the only variety to produce fruit. The Boyne variety slipped to second place this year due to the extensive winterkill of the previous year's growth. Boyne was second best in terms of vegetative re-growth. Of the primocane varieties, Red River never thrived or produced fruit and as a result Red River was dropped from the trial in 2001. Double Delight stayed in the trial as it continued to show good vegetative growth, but had not yet produced mature fruit on first year canes in the southern Yukon. Souris was consolidated from three rows into two in 2001 as it ranked third in vigour for the floricane varieties and room was needed for two new varieties. Honey Queen will continue to be evaluated to see how often fruit will mature in the short Yukon growing season.

Mulch laying in cooperative strawberry variety trial.

At the beginning of the 2000 growing season, six varieties of strawberries were planted to test their viability in the southern Yukon. The varieties tested were Bounty, Cavendish, Glooscap, Honeyoye, Kent and Toklat. Input on trial design and mulching techniques was provided from a commercial producer near Fairbanks. On June 1, 12 rows were planted with three metre spacing between the rows and 45 centimetres spacing between each plant. Infrared transmissive (IRT) plastic mulch was laid over each planting bed with the hope that this mulch would allow soil warming while effectively controlling weed growth. Within three weeks of transplanting, several of the plants showed signs of stress and died soon thereafter. Cavendish was the healthiest and most productive of the varieties, followed closely by Gloosclap. Toklat is a variety grown in Alaska and has proven successful in the test plots, but the stock was limited and a full trial was initiated in 2001.

• 2001 Agriculture Branch trials

The 2001 growing season at the Forestry Farm was the third year in a four-year grain maturity trial undertaken at the Takhini Forestry Farm. A horticultural cash crop of potatoes and turnips was also grown at the forestry farm to test different varieties and determine profitability.

The growing degree day (GDD) rating for the 2001 season at the forestry farm was Class 5 (700-900 GDD), which falls in the 30-year normal classification for this area.

This year's horticulture crop consisted of Red Pontiac potatoes and three varieties of turnips. This year's potato harvest provided the most lucrative yield in seven years of trials at this site, exceeding the previous years best crop of "Norland" by over 15 per cent. The turnips that were germinated under IRT wave selective mulch provided the highest percentage of marketable vegetables when compared to other treatments. Of the three varieties (Laurentian, Early Snowball and Purple Top) the Purple Top variety provided the highest yield overall.

The barley crop was grown for 132 days. The barley plot produced a marketable harvest of 4.1 tonnes per hectare. At a local selling price of $298 per tonne, this produced a net profit of $578.56 per hectare.

The wheat plot produced a marketable harvest of 1.75 tonnes per hectare. At a local selling price of $310.00 per tonne, the net loss was $103.83 per hectare. The wheat harvested would suffice for feed although it was very poor seed quality due to the immaturity of the crop.

The oat plot was sampled on September 13, 2001 when the oat grain was in the soft to medium dough stage of maturity. This plot produced a marketable harvest of 5.6 tonnes per hectare. At a local selling price of $302 per tonne, the net return was $1,056.54 per hectare.

Harvesting grain in the Takhini valley.

Cooperative small fruit trials

The summer of 2001 was the fourth growing season in a multi-year raspberry variety trial undertaken at a farm located on the north side of the Takhini River.

Despite the mild winter of 2000-2001, many of the over-wintering floricanes did not produce fruit. The exception to this was the Kiska variety out of Alaska, which had experienced less winterkill the previous winter and had displayed the most plant vigour in the 2000 growing season.

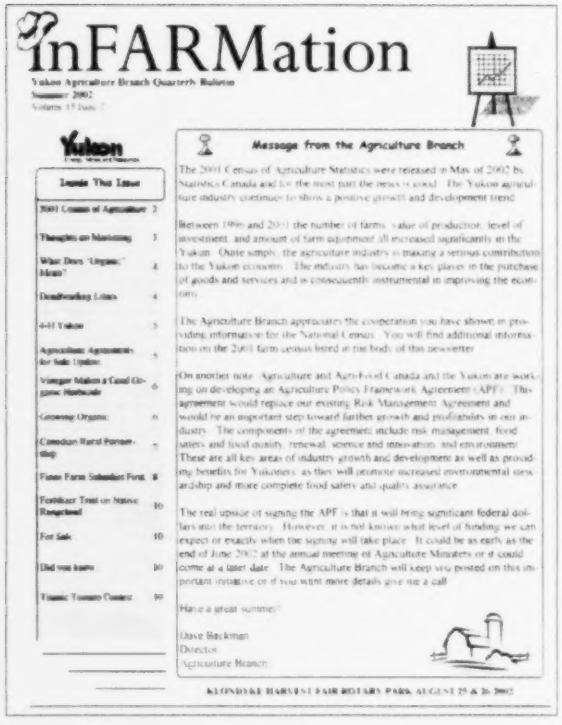
On August 8th the final raspberry variety assessment was conducted. Kiska displayed the most plant vigour, both in terms of plant re-growth and as the only variety to produce fruit in any quantity. The Honey Queen variety produced a small amount of fruit as well. The usually reliable Boyne variety did not produce fruit, and continued to hold second place in terms of plant vigour. One variety, Red River, was dropped from commercial evaluation and two new varieties from the University of Saskatchewan, SK Red Mammoth and SK Red Bounty were added for evaluation starting in 2002.

In the strawberry trial, the Toklat variety from Alaska produced the most vigorous growth, the most runners and the most fruit in the 2001 season. Other observations included the excessive weed growth under the IRT mulch that was supposed to inhibit weed growth and the taste that the farm owner's dogs acquired for ripening fruit. Quantitative fruit assessments are scheduled to begin in 2002.

Toklat strawberries displaying vigorous runner growth.

EXTENSION SERVICES

General


InFARMation

Yukon Agriculture Branch Quarterly Bulletin

Yukon

Inside This Issue

Message from the Agriculture Branch

The 2001 Census of Agriculture Statistics were released in May of 2002 by Statistics Canada and for the most part the news is good. The Yukon agriculture industry continues to show a positive growth and development trend.

Between 1996 and 2001 the number of farms, value of production, level of investment, and amount of farm equipment all increased significantly in the Yukon. Quite simply, the agriculture industry is making a serious contribution to the Yukon economy. The industry has become a key player in the purchase of goods and services and is consequently instrumental in improving the economy.

The Agriculture Branch appreciates the cooperation you have shown in providing information for the National Census. You will find additional information on the 2001 farm census listed in the body of this newsletter.

On another note, Agriculture and Agri-Food Canada and the Yukon are working on developing an Agriculture Policy Framework Agreement (APF). This agreement would replace our existing Risk Management Agreement and would be an important step toward further growth and profitability in our industry. The components of the agreement include risk management, food safety and food quality, renewal, science and innovation, and environment. These are all key areas of industry growth and development as well as providing benefits for Yukoners, as they will promote increased environmental stewardship and more complete food safety and quality assurance.

The real upside of signing the APF is that it will bring significant federal dollars into the territory. However, it is not known what level of funding we can expect or exactly when the signing will take place. It could be as early as the end of June 2002 at the annual meeting of Agriculture Ministers or it could come at a later date. The Agriculture Branch will keep you posted on this important initiative or if you want more details give me a call.

Have a great summer!

Dave Beckman
Director
Agriculture Branch

KLONDYKE HARVEST FAIR ROTARY PARK AUGUST 25 & 26 2002

The branch also maintains a collection of agricultural resource materials for reference. The collection includes books, pamphlets and videos on a wide range of agricultural subjects, as well as a herbarium and a display of garden insects.

A quarterly bulletin, InFARMation, has been produced by the branch since 1987 to keep producers updated on industry activities and events. It contains articles on crops, sustainable agriculture, extension services, livestock, industry trends, and research and demonstration projects. Circulation has increased from about 300 copies per issue in 1994 to approximately 700 copies in 2001.

The Canada Plan Service, available at the Agriculture Branch office, has over 100 plans available for the construction of agricultural facilities. Plans are available for most farm buildings, root cellars, livestock shelters, animal chutes and grain storage structures. Up to 30 of these plans are used by Yukon producers each year.

The feed, soil and irrigation water testing service is one of the most popular programs offered by the branch. Commercial farmers can bring in samples for shipment to laboratories for analysis. In this way, producers can determine if their soils, feeds or water source are deficient in any important nutrients and can take corrective action.

2000-2001 seminars and symposia

The semi-annual agricultural symposia sponsored by the Agriculture Branch are very popular. They provide local producers with an opportunity to share their experiences and to hear from experts on a variety of topics.

In March 2000, the Agriculture Branch sponsored a one-day seminar, "Growing, Collecting and Using Herbs and Medicinal Plants." Speakers included Bev Gray, a local chartered herbalist and successful producer of local herb teas, salves, tinctures and therapeutic oils; Ruth Welsh, a First Nation elder, on the use of local native plants in traditional medicine; and Dr. Moyhuddin Mirza, greenhouse crops and research specialist from Alberta Agriculture on the production of medicinal plants under greenhouse conditions in Alberta. Interest in this seminar was exceptional with close to 140 people attending the presentations.

The 13th annual North of 60° Agriculture Conference was held in Whitehorse on November 2-3, 2000. This annual conference includes a one- or two-day seminar followed by an evening banquet featuring locally grown and raised Yukon foods. The seminar agenda for the 2000 conference included, on Friday, a half-day interactive workshop on climate change and its impact on agriculture and rural communities in the north. This was followed by a full Saturday session including presentations on elk ranching, soils and soil fertility, forage production and weed control. The evening banquet featured the annual Farmer of the Year presentation and a slideshow that highlighted the year in Yukon agriculture.

In the spring of 2001, a full-day small fruit seminar was held featuring Lloyd Hausher, the Alberta provincial fruit crops specialist. This was a condensed version of a three-day berry production workshop that is held yearly in Alberta. The Yukon version discussed production and management of raspberries, strawberries and saskatoon berries in a northern climate. Similar to the 2000 spring seminar, this was a popular topic that drew a crowd of over 120 participants.

The 14th annual North of 60° Agriculture Conference was held on the first Saturday of November in 2001, at the Gold Rush Inn in Whitehorse. The focus for this conference was marketing and it began with a presentation on two joint initiatives between the Yukon and NWT. The first was a sectoral agriculture cost-of-production report for the two territories and the second was the development of a manual for website marketing. The featured speaker for the morning session was Ken Assenheimer, a very successful Alberta forage producer who spoke to Yukon producers about a market-based approach to growing hay and selling it to the toughest consumer markets. The afternoon session included presentations by five local entrepreneurs who were successfully marketing Yukon products both within and outside of the territory.

The evening banquet was well attended and again featured a fine selection of Yukon foods. Following the banquet and the presentation of the annual Farmer of the Year award, there was a presentation on farming in Iceland and the 4th Circumpolar Agriculture Conference, held in northern Iceland in August 2001.

A class of Master Gardener students writing their final exam. (inset) Ingrid Wilcox instructing a class of Master Gardeners.

Master Gardener course

The third Yukon Master Gardener course was held over three weekends in late January and early February 2000. Local gardening experts and Agriculture Branch staff instructed 25 experienced northern gardeners in 12 different subject areas of horticulture. Students were provided with training for a small fee and a commitment to return 40 hours of volunteer time back to the community to educate other northern gardeners. The Yukon Master Gardener course was initiated in 1997 with help from the Alaska Cooperative Extension service.

Summary of Agriculture Branch's public contacts from 1995 to 2001.

Activity	**Number of contacts**						
	1995	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Telephone calls	2,475	2,643	2,461	2,482	2,358	*1,713	*1,835
Office calls	907	1,263	1,227	1,183	1,069	*1,002	*955
Farm visits	264	261	215	213	205	**237	**276

*Office visits declining due to the change of office and drop in telephone calls could be due to increased reliance on e-mails.
**Farm call increase due to Agriculture Branch effort to provide additional personal service.

POLICY INITIATIVES

Agriculture and grazing lease policy evaluations

For years, the development of the agricultural industry in the Yukon has been driven and determined by appropriate agriculture and grazing lease policies. The first agriculture policy was developed in 1982, followed by a grazing lease policy in 1987 and a revised agriculture policy in 1991.

In the late 1990s, the agriculture and grazing lease policies were evaluated. The comprehensive evaluation reports were released to the public in July 2000.

There has been no further work or development of these policies since the evaluation report was released. In 2000 and 2001, the Government of Yukon undertook comprehensive initiatives and negotiations to bring about a process of government renewal and proceeded with devolution. Because of these progressive initiatives, it was concluded that further revisions and review of the agriculture and grazing lease policies should not commence until the summer of 2003.

It is anticipated that there will be positive, constructive and timely revisions to the policies following devolution and renewal. Both of these significant government initiatives will help bring clarity to the development of the agricultural industry, as well as streamline the process for obtaining agricultural land and grazing leases in the Yukon.

TRAINING INITIATIVES

Education and Training Trust Fund

The Education and Training Trust Fund (ETTF) is administered by an independent committee of the Yukon Agricultural Association, with representation from all outlying communities. The purpose of the fund is to enable agriculture-related education and training of Yukoners. The ETTF Committee will award funds to projects aimed at increasing the knowledge and skills needed to develop a strong, diversified agricultural economy.

There are five broad categories for projects: farm management, homesteading, agricultural methods, farm efficiency strategies and market diversification. The Education Training Trust Fund Committee approved 10 projects in January 2000 including training in organic inspection, gardening for students and low income women and community garden training programs.

AGRICULTURE PLANNING AND ADVISORY COMMITTEE

The Agriculture Planning and Advisory Committee (APAC) was established in 1984 to provide a mechanism for ongoing consultation between the federal and territorial governments and the agricultural industry in the Yukon. The committee has a mandate to make recommendations to the Minister of Energy, Mines and Resources

on any agricultural issue. It is chaired by the president of the Yukon Agricultural Association or their designate, and co-chaired by a senior Yukon government representative.

APAC held nine meetings in 2000 and 2001. The committee usually meets in Whitehorse to discuss such issues as the Agriculture Policy Evaluation, planning for the Canadian Adaptation and Rural Development Fund, the fall fair program, farmers market program, multi-year development plan, and activities of the Canadian Farm Business Management Council.

INFRASTRUCTURE DEVELOPMENT

ABATTOIR

The only licensed abattoir in the Yukon continues to provide inspected slaughter services for both white and red meats. During the summer operating season of 2001, there was a scheduled service beginning in May and ending in November. Fresh inspected chicken were available at a number of retail outlets in Dawson City and Whitehorse as well as directly from the abattoir.

There has been limited use of the abattoir for red meats (two producers), primarily due to distances from producers in the southern Yukon. The red meat slaughtered at the abattoir is mostly sold in private sales organized by the individual producers. However, producers of white meat have shown increased interest in using the abattoir to broaden their market opportunities. This may be due to quick and complete processing offered by the abattoir. The poultry cages purchased by the branch in 1999 have contributed to the use of the abattoir by poultry producers.

Animals slaughtered in abattoir, 2000-2001.

Animals	2000	2001
Beef	18	14
Pork	5	6
Chickens	3,000	1,700
Turkeys	20	52

"Yukon approved" side of pork at the Partridge Creek abattoir.

VETERINARY SERVICES

The Yukon is serviced by two veterinary clinics in Whitehorse and one veterinary clinic in Dawson City. One of the Whitehorse veterinarians travels to various communities and farms to provide large animal veterinary services. The Agriculture and Agri-Food Canada veterinarians in Dawson Creek, B.C. also visit the Yukon to test game-farmed and domestic animals for brucellosis and tuberculosis, and to handle issues and concerns related to Equine Infectious Anemia (EIA).

FARM CAPITAL

Based on the 1996 census, there were 160 farms in the territory, and the value of farm infrastructure, land and machinery was $44.8 million. The 2001 census indicates that the number of farms has increased to 170 and the value of investment has increased to $50.2 million. Clearly the level of investment and value of farm equity continues on an upward trend. It follows that the agricultural industry continues to be a significant player in the purchase of local goods and services.

JOINT FEDERAL-YUKON PROGRAMS

MULTI-YEAR DEVELOPMENT PLAN

A Multi-year Development Plan (MYDP) for the agricultural industry was developed and completed between March and June, 2000. A steering committee comprised of territorial and federal officials oversaw the project, which was carried out by Serecon, an Alberta consulting firm specializing in agriculture.

The MYDP considered and made recommendations on a number of industry-wide strategies, such as:

- infrastructure,
- regulatory and support programs,
- finance,
- research and development, and
- marketing.

In addition, a number of sector-specific strategies were considered in the areas of:

- hay production,
- game farming,
- market gardening,
- greenhousing, and
- poultry production.

Following the completion of the MYDP, the Government of Yukon and industry representatives reviewed the recommendations, prioritising strategies that could be implemented immediately. The plan recommends a course of action that could be implemented over the next five years.

AGRICULTURE RISK MANAGEMENT FRAMEWORK AGREEMENT

Crop insurance began in Canada in 1939. Since that time, all the provinces have entered into agreements with Canada to be part of a national program. However, until recently, the Yukon did not have the opportunity to participate in this program. In July 2000, a Letter of Understanding was signed between Canada and the Yukon to pursue discussions regarding entering into a longer-term framework agreement.

In November 2000, the Yukon was allocated federal funding provided that a framework agreement would be signed. This eventually led to the signing of the

Umbrella Agriculture Risk Management Agreement in June 2001 at the annual meeting of agriculture ministers held in Whitehorse. The agreement was based on the traditional 60(federal)/40(territory) cost share.

The current framework agreement will expire March 31, 2003. Negotiations are currently underway between Canada, the provinces and the territories to consider a new Agriculture Policy Framework (APF) Agreement for the time period April 1, 2003 to March 31, 2008. The new APF would encompass a number of new initiatives and make Canada a world leader in the future direction of agriculture. The federal and most provincial and territorial agriculture ministers signed the new APF agreement at the annual meeting of Agriculture Ministers that was held in Halifax in July 2002.

CANADA-YUKON FORAGE CROP LOSS PROGRAM

The summer of 2000 was exceptionally wet and cool, and because of this, many farmers were unable to harvest their crops. As a result, the Yukon Agricultural Association and several farmers approached the Government of Yukon seeking disaster relief for crop losses.

This led to the signing of a Companion Forage Crop Loss Program designed under the Umbrella Agriculture Risk Management Agreement. As it took some months to develop the companion program, it did not take effect until the late summer and fall of 2001.

Bromegrass hay bales waiting in the field to be picked up, 2001.

The Agriculture Branch set a period of time from August 1, 2001 to October 1, 2001 for eligible producers to submit a claim for payment. In total, 34 producers submitted claims. The total payment for crop losses in the year 2000 came to $167,500, which was shared on a 60(federal)/40(territory) split. The payment to producers was based on $75 per acre crop loss.

This was the first time that such a payment had been made to Yukon forage producers. It will be a one time only payment. For future needs on crop losses, a forage crop insurance program could be developed under the anticipated Agriculture Policy Framework Agreement. The Agriculture Policy Framework Agreement, which is being supported by agriculture ministers across Canada and developed by federal, provincial and territorial officials, is planned to come into effect on April 1, 2003.

FEDERAL GOVERNMENT SERVICES AND PROGRAMS

AGRICULTURE AND AGRI-FOOD CANADA

The 2000-2001 time period was one of significant change for Agriculture and Agri-Food Canada (AAFC), with considerable progress made towards the broadening of agricultural policy to meet the needs of the sector and Canadians in a more comprehensive and integrated way.

In June 2000, federal, provincial and territorial agriculture ministers agreed, for the first time ever, on a single framework for managing agricultural risk. This was a major step in providing producers with the security they need to grow and prosper.

Work was done in co-operation with the provinces and territories in 2001 to build an integrated policy framework that would respond to the new business climate. At the annual conference of federal, provincial and territorial ministers and deputy-ministers of agriculture, held in Whitehorse in June 2001, all 10 provinces, the territories and the federal government agreed, in principle, to a new Agriculture Policy Framework (APF). The APF will ensure the prosperity of the agriculture and agri-food sector by making Canada the world leader in food safety, innovation and environmentally responsible production. The components of the APF include risk management, on-farm food safety, protection of the environment, science and research and renewal of the sector.

The AAFC position in the Yukon continues to provide delivery of AAFC and Canadian Food Inspection Agency (CFIA) programs. At the end of 2001, the AAFC also reported to the federal Market and Industry Services Branch (MISB), Alberta and Territories Office in Edmonton. The AAFC manager of Territorial Affairs shares an office location with the Yukon Agriculture Branch.

Subsequent to the time period of this report, AAFC has undergone a significant change in its governance structure to realign the department into horizontal teams that are responsible for the results in the five priority areas identified in the new APF. These are: food safety, risk management, innovation and renewal, environment and international issues. There are also a number of enabling teams responsible for corporate functions, policy analysis and planning and program delivery that support and sustain the horizontal teams. Although the Yukon AAFC position still reports to the office in Edmonton, the primary duties of the position are linked to the policy, innovation and renewal and food safety teams.

Research Branch

The study trials to assess the feasibility of using elemental sulphur to reduce soil pH on irrigated stands of bromegrass in the Takhini valley were completed in 2001. The

project was funded by the Canadian Adaptation and Rural Development (CARD) Fund, to look for cost-effective ways to reduce the alkalinity and boost yields in some southwest Yukon cultivated soils. Final results indicated that neither soil pH nor forage yield were changed significantly through the addition of low rates of sulphur to the soil when compared to unfertilized control plots.

Soil monitoring continued through a network of air and soil temperature sites in the territory. Impacts on permafrost conditions of clearing land in the Klondike valley also continued to be monitored, as well as impacts of snow depths on winter soil temperatures in the Takhini valley. Winter soil temperatures are important for understanding the survival of legumes and some grasses in the Whitehorse area. Reduced snow loads allow soils to reach very low temperatures, which can damage root systems.

Finally, work continues on detailed and generalized soil maps of the Territory.

Research Branch programs and activities have become the responsibility of the environment team under the new AAFC structure.

Market and Industry Services Branch

During 2000 and 2001, the Market and Industry Services Branch of AAFC worked closely with industry, the Yukon Agriculture Branch, and the Yukon Department of Economic Development (now Energy, Mines and Resources) to enhance the Yukon agri-food sector's share of domestic and international markets. The branch continued to be an ex-officio member of the Yukon Agricultural Planning and Advisory Committee over this time period.

MISB activities focused on international business development services for the Canadian agri-food exporter through the delivery of the Agri-Food Trade Service (ATS). Through close coordination between AAFC and the federal Department of Foreign Affairs and International Trade (DFAIT), ATS provided centralized access to international market information, export trade counselling and export support activities.

In order to facilitate this function, ATS links regional offices with national experts and Agri-Food Trade Commissioners in Canadian embassies. Through the ATS, Yukon companies have been listed in the WinExport database that is accessed by 1,200 Canadian trade staff in Canada and abroad. These Yukon companies have also received notification of available trade documents, international trade statistics, regulatory information, trade leads and market studies through the Fax Back systems implemented by MISB, and have taken advantage of the trade programs offered both domestically and in conjunction with international trade shows.

Within the new AAFC structure, responsibility for the ATS and other MISB activities has been transferred to the international trade team.

Policy Branch

The Policy Branch of AAFC provided a variety of programs to assist agricultural producers to adapt to the changing regulatory and economic conditions facing the industry in 2000 and 2001. As previously mentioned, YAA received $249,408 of the $498,816 allocated to the Yukon from the CARD Fund through to the end of March 2003 during this time period.

In 2000-2001, the Government of Yukon's Agriculture Branch and the Yukon Agricultural Association maintained their membership in the Canadian Farm Business Management Council. During this time, the Yukon and Northwest Territories collaborated to conduct a cost of agricultural production study for the Yukon and NWT and to design a website related to farm business management in the North.

Policy Branch functions and activities have now become the responsibility of the new policy analysis and planning horizontal team at AAFC.

Canadian Food Inspection Agency

The creation of the Canadian Food Inspection Agency (CFIA) in April 1997, brought together inspection and related services previously provided through the activities of four federal government departments: Agriculture and Agri-Food Canada, Fisheries and Oceans Canada, Health Canada and Industry Canada. The establishment of the CFIA consolidated the delivery of all federal food, animal and plant health inspection programs. The CFIA reports to Parliament through the Minister of Agriculture and Agri-Food Canada.

All inspection services related to food safety, economic fraud, trade-related requirements, and animal and plant health programs are provided by CFIA. Staff monitor the safety and quality of fish, meats, dairy products, fruits and vegetables, both fresh and processed. They register and inspect processing plants to ensure they meet federal standards, and monitor imports to ensure that food entering Canada meets the same stringent standards set for our own producers. Also, when Canadian food is shipped to other countries, inspectors are often asked to certify that the products meet the requirements of the importing country.

Within the Yukon, CFIA provides inspection for the federally registered egg grading station and fish processing plant. In addition, inspections occur at Yukon food producing establishments for such products as smoked salmon, bottled water and beer under the Food and Drugs Act, and processed products that do not fall under specific federal legislation.

The CFIA works to stop diseases and pests from entering Canada and to control or eradicate diseases if they occur. During the summer of 2001, the foot and mouth disease outbreak in Britain resulted in the implementation of inspection and disinfection procedures for international flights arriving at the Whitehorse Airport.

The CFIA also certifies plants and animals that Canada exports around the world. Animal health services for the Yukon are provided by the Dawson Creek, B.C. office which does herd testing and health certificates for the export of livestock and pets. This office also works with the Government of Yukon's Agriculture Branch in an advisory capacity for the territorial abattoir.

The CFIA examines labels on food products to ensure their accuracy. This includes checking quantities and verifying the composition, nutritional information and grade of processed foods. Retail inspections of Yukon grocery stores occurred in 2001 to ensure food products were accurately labelled.

Rural Secretariat

The Rural Secretariat of Agriculture and Agri-Food Canada is a focal point for rural policy development and rural issues within the federal government. The Rural Secretariat, through the Canadian Rural Partnership (CRP) and the individual programs and services delivered by federal departments and agencies, was implemented to meet the Government of Canada's commitment to build stronger rural communities.

The CRP focused on five areas:

1. Partnerships Partnerships help government work better across all levels of jurisdiction: federal, territorial, municipal and First Nation. An interdepartmental working group of 26 federal departments was initiated to work on Canadian rural and northern partnerships. Also, there are regional rural teams in each province and territory to support rural development projects and provide a mechanism to address rural issues. The rural team in the Yukon includes members from federal, territorial, municipal and First Nation governments, as well as private sector and non-profit organizations.

2. Rural dialogue In order to better understand local and regional issues, and to identify the appropriate role for the federal government in addressing these issues, a number of dialogue activities with rural Canadians have been conducted. A National Rural Conference was held in Magog-Orford, Quebec in April 2000. Eleven priority areas were identified by rural Canadians who attended the conference that led to the development of a Federal Framework for Action in Rural Canada. In the Yukon, a survey of 900 Yukon residents was conducted in 2001 to identify specific key priorities for Yukon citizens and a Yukon rural conference that built upon the input received from this survey was held in Haines Junction, Yukon in June 2001. Rural Team Yukon (RTY) used information from both activities to develop the specific team action plan for 2002.

3. Rural lens A significant component of the CRP is to promote and foster a greater inclusion of rural considerations in federal policies and programs. Decision-makers are being asked to assess the effect of new policies and programs on rural Canada,

whether federal programs and services are accessible in rural areas and whether there is flexibility for decision making at the local level.

4. Information outreach The Government of Canada is making a special effort to reach Canadians in rural and remote areas. Through community newspapers, radio stations, the internet and federal points of public access, information about federal programs and services is being made accessible to citizens in rural and remote areas of the country. Rural Team Yukon initiated a number of activities to increase knowledge and promote the work of the team including an RTY presentation, an RTY new member resource book, an RTY website and the development of a RTY newsletter.

5. Pilot projects The CRP Pilot Projects Initiative was designed to work through partnerships with community groups operating in rural areas. These included the private sector, the voluntary sector, cooperatives and other levels of government. During 2000 and 2001, 13.pilot projects were funded in the Yukon. In 2000, a total of $148,974 in funding was allocated to the following projects: the Yukon Rural Business Mentorship Service, the Yukon's Community Health Representative Peer Mentoring Project, the Little Salmon/Carmacks First Nation Farming Enterprise, the Yukon Work Information Network (YuWIN) Pilot Project, the First Nations Furbearer Monitoring Project, Partners in Independence: Yukon Territory and Rural Community Development and World Heritage. The 2001 projects included the Yukon Reading Readiness Project, a rural Yukon First Nation personal computer technician, the Yukon River Watershed: Assessment and Awareness Project, the Yukon Volunteer Bureau, the Yukon Work Information Network: Phase II Rural Development and Identification de l'état de santé de la communauté franco-yukonnaise. Total CRP funding for the 2001 projects was $187,418 which leveraged $455,064 in funding from other sources.

Canadian Adaptation and Rural Development Fund

The Canadian Adaptation and Rural Development (CARD) Fund, a federal program administered by the Yukon Agricultural Association, is designed to assist rural and agricultural people and communities to adjust to the changing economy.

In 1999, the federal Agriculture Minister, Lyle Vanclief, announced the second phase of the CARD program (CARD II). The Yukon Agricultural Association was allocated $498,516 over four years of CARD II program funding to be distributed to projects around the Yukon. During 2000 and 2001, the Yukon received $249,408 of CARD II funds.

This second phase of the CARD Program focused on six priority areas: human resource capacity building, capturing majority opportunities, research/innovation, food safety and quality, environmental sustainability and rural development. A summary of projects funded is shown in the table in the following page. Copies of the project results may be obtained from the Yukon Agricultural Association office.

Summary of CARD projects funded in 2000 and 2001.

Project title	CARD priority	CARD fund contribution
4H Yukon	human resource capacity building	$11,500
Education and training for greenhouse production of seedlings for low-income women	human resource capacity building	$,7500
4th Circumpolar Agriculture Conference	human resource capacity building	$11,953
Klondyke valley market gardeners	capturing market opportunities	$3,625
Soil management for small fruit production in southwest Yukon	research/innovation	$2,950
Biology and ecology of morel mushrooms in two Yukon forest fire sites	research/innovation	$3,750
Klondyke valley trial and propagation facility	research/innovation	$7,208
Saskatoon (juneberry) trials	research/innovation	$5,550
Strawberry variety trial	research/innovation	$3,000
Demonstration hydraulic ram pump	environmental sustainability	$1,050
Little Salmon/Carmacks First Nation farming enterprise – root cellar component	rural development	$10,000
Downtown Urban Gardeners Society	rural development	$6,000
Klondyke Harvest Fair	rural development	$15,500

INDUSTRY ASSOCIATIONS

YUKON AGRICULTURAL ASSOCIATION

The Yukon Agricultural Association is a non-profit organization that was created to protect the interests and promote the development of the agricultural industry in the Yukon. The association works closely with government to achieve its goals. The association is comprised of three chapters: Whitehorse, Stewart Valley and Dawson City. An association office is maintained in Whitehorse.

YAA efforts in 2000 and 2001 were devoted to the following initiatives:

- public education and awareness about the association and the agricultural industry;
- Klondyke Harvest Fair program;
- fundraising through membership sales, as well as obtaining funds from the Yukon government for the Klondyke Harvest Fair and office administration, and from the federal government under the Canadian Adaptation and Rural Development Fund I & II and the Agri-Food Awareness Program;
- numerous meetings and reviews about issues and concerns surrounding the agricultural industry including the Canadian Farm Business Management Council, Agriculture Planning and Advisory Committee (APAC), Agriculture and Grazing Lease Policies Evaluation;
- participation in events including the Annual Agricultural Symposium, Trade Show and Agri-Food Celebrations;
- education in the classroom;
- fostering circumpolar awareness among members; and
- attending and presenting at the 4th Circumpolar Agriculture Conference held in Iceland in late August 2001.

The Yukon Agricultural Association can be contacted at:
203-302 Steele Street, Whitehorse, Yukon Y1A 2C5
Phone (867) 668-6864, Fax (867) 393-3566
E-mail: *yukonag@yukonaa.com*, Website: *www.yukonaa.com*

GAME GROWERS ASSOCIATION

The Game Growers Association of Yukon (GGAY) was established in 1989 to represent and promote the Yukon's game farming. The association has grown to 16 active members who meet on a periodic basis to discuss key concerns and issues related primarily to the farming of elk and bison.

Bison ranch at Stoney Creek.

The number of elk in captivity during 2000 and 2001 peaked at 150 head, which indicates slow and steady growth of the sector since the 1990s. The GGAY continues to be active in national and western associations and committees. The association liaises very closely with the Canadian Cervid Council, which in turn has helped to raise awareness of game farming in Canada and in the Yukon.

Yukon game farmers continue to produce high quality antler velvet, meat, and breeding stock. The GGAY has also worked with the Yukon Agriculture Branch on establishing a sound database and a trace-back system, and setting up a voluntary Chronic Wasting Disease (CWD) Surveillance Program. These initiatives have established the sound and responsible management of elk in the Yukon.

Overall, the years 2000 and 2001 were difficult for elk farmers in Canada. The outbreak of CWD in Saskatchewan caused thousands of animals to be destroyed and lead to a serious downturn in market prices. Other factors such as dry weather conditions on the prairies and a downturn in the Asian market for antler velvet created even further problems. However, Yukon elk farmers have weathered most of the problems so far and are actively seeking other alternative marketing. The game farm industry in the Yukon retains their disease-free status and remains optimistic over the future growth of the sector.

YUKON 4-H PROGRAM

The 4-H program is an international youth program dedicated to social and technical skill development for young people. "4-H" stands for the pledging of heart, health, head and hands to community service and responsibility.

The Yukon 4-H program has three clubs in the Yukon — Whitehorse, Watson Lake and Dawson City and each community includes one multi-club, one horse club and one Cloverbud club. There are approximately 40 club members and nine adults helping out as leaders or in other capacities.

The Yukon 4-H Council was active in 2000 and 2001. Several meetings were held generally in the form of conference calls made from the Agriculture Branch. This made it possible to easily connect to the communities with minimum expense and travel. The council's main roles are to ensure the smooth delivery of the 4-H program and to obtain funding for various 4-H activities such as exchanges, leadership workshops and other forms of training.

Highlights of the 4-H program over the past two years include the Watson Lake 4-H Club travelling to Smithers, B.C. and to the PNE in Vancouver, B.C. to show dogs as well as to take part in judging clinics. The Dawson City Club travelled to Anchorage, Alaska to take part in the 4-H horse show. The Yukon 4-H Council continued to obtain CARD funds for travel and training purposes. 4-H clubs also participated in the Klondyke Harvest Fair and held various types of training sessions and workshops. Finally, a key highlight was the establishment of a Whitehorse Cloverbud Club in 2001.

MARKETING AND PUBLIC AWARENESS

FALL HARVEST FAIRS

The Klondyke Harvest Fair is the major annual public awareness initiative of the Whitehorse Chapter of the Yukon Agricultural Association. The fair is held over a weekend in August at Rotary Peace Park in downtown Whitehorse. The bench show is a major attraction for both exhibitors of crafts and agricultural products and the thousands of people attending the fair each year. In addition to the bench show, there is a farmers market, midway, livestock display, entertainment and food concessions.

Other smaller fairs also took place in 2000 and 2001. Watson Lake, Carmacks, the Hamlet of Mount Lorne and Mayo all hosted fairs in their communities.

MEDIA COVERAGE

The Yukon's media coverage of agricultural events and activities over the past few years has been consistent and this trend continued in 2000 and 2001. The *Whitehorse Star* published 12 articles on agricultural issues during those two years, five items in 2000 and seven in 2001. The *Klondike Sun* published three articles focused on agriculture, including information about the Bear Creek Potato Festival. The *Yukon News* published articles covering such items as the Klondyke Harvest Fair.

John Harmon writes a weekly column entitled "The Real Dirt" for the *Yukon News*. This column covers various sectors of the agricultural industry, including information on houseplants, gardening advice and soils.

Members of our branch are interviewed several times a year on local radio to discuss current issues in agriculture. The Yukon Agricultural Association also uses local media to increase awareness of agriculture in the Yukon.

SCHOOL PRESENTATIONS

In 2000 and 2001, Barb Drury delivered two agricultural education programs in local schools, sponsored in part by the Agriculture Branch. The purpose of the first program, Agriculture in the Classroom, was to provide awareness of the agricultural industry and healthy farm practices. This program focused on grade four students at Whitehorse elementary schools. In-class demonstration sessions, video presentations and field trips were used in the program. The second program, Careers in Agriculture, focused on providing Whitehorse high school students with a higher awareness of agriculture as a career. Presentations on the different options available in farming and agri-business were made throughout the semester.

Another successful project has been the lending out of egg incubators to various schools. The Agriculture Branch has two incubators available. Branch staff would go into the classroom to provide information about hatching eggs and instructions on how to use the incubators.

Appendix 1

YUKON AGRICULTURAL EXTENSION PUBLICATIONS, 2000-2001

Agriculture Branch, Department of Renewable Resources. *InFARMation* (Quarterly Bulletin). Compiled and edited by T. Hill and M. Ball.

Beckman, D.B., Hill, A.R., Sproule, B. and Fair, B., 2000. *Yukon Agriculture State of the Industry, 1998-1999.* Department of Renewable Resources, Government of Yukon.

Hill, T. and Ball, M., 2000. *Yukon Agricultural Research and Demonstration Project, 2000 Field Season,* Department of Renewable Resources, Government of Yukon.

Hill, T., 2001. *Shakwak Highway Revegetation: km 1841.6-1965.8, Progress Report #2,* Department of Renewable Resources, Government of Yukon.

Hill, T. and Ball, M., 2001. *Yukon Agricultural Research and Demonstration Project, 2001 Field Season,* Department of Renewable Resources, Government of Yukon.

Serecon Management Consulting Inc, 2000. *Yukon Agriculture Multi-Year Development Plan.*

The Grove family farm beside the Takhini River.

APPENDIX 2

RASPBERRY VARIETY DESCRIPTIONS

Boyne Developed at the Agriculture Canada Research Station at Morden, Manitoba and introduced in 1960, it is a combination of Chief and Indian Summer. It is the hardiest and most consistently productive cultivar for the prairies and the main cultivar for commercial production in all colder regions of Canada and the United States. Canes are medium in height, thick, erect and stocky, with many lateral branches. Fruit is medium-sized, dark red, firm, juicy, aromatic and tart.

Double Delight Developed by the Agriculture Canada Research Station, Morden, Manitoba, it is a combination of Fall Red, native primocane fruiting type, Cheyenne, Wyoming, Fall Red, and Boyne. Double Delight canes are stout with sparse, short spines and grow to a height of 5 feet. The medium red berries are sweet, tart and excellent.

Honey Queen Introduced by Robert Erskine from Alberta's Rocky Mountain House in the mid-sixties, it is the hardiest of the yellow raspberries. It has good-sized, aromatic berries that have a mild but entirely different flavour than the red berries. The berries are considered soft, and poorly suited to freezing and processing, but are excellent fresh.

Kiska Developed by Dr. Arvo Kallio at the Agricultural and Forestry Experiment Station, Fairbanks, Alaska, Kiska raspberries have thin, willowy canes. Under optimum fertility and moisture, canes may easily reach 6-8 feet in height. These canes tend to bend outward and downward, making harvesting difficult.

Red River Selected in 1978 at the Agriculture Canada Research Station, Morden, Manitoba, it is a combination of Fall Red, native primocane fruiting type, Cheyenne, Wyoming, Fall Red, and Boyne. Red River fruits earlier than other selections tested. It has medium red berries that are sweet, tart and good. Canes are relatively short and stout with sparse short spines, and grow to a height of 3.5 feet.

Souris Developed by Agriculture Canada Research Station, Morden, Manitoba, it is an improved selection of Boyne because it is better tasting, a heavier producer of fruit and has 15 per cent better spider mite resistance.

SK Red Mammoth Developed by the Department of Plant Science at the University of Saskatchewan, it is a variant of Muskoka. It is a large-fruited, red raspberry with yields similar to Boyne, but with longer shelf life.

SK Red Bounty Developed by the Department of Plant Science at the University of Saskatchewan, it is a combination of Trent and Fraser. It is superior to Boyne in both yield and winter hardiness. The berries show good resistance to skin injury.

STRAWBERRY VARIETY DESCRIPTIONS

Bounty Developed in 1972 by Agriculture Canada, it is a cross between Jerseybelle and Senga Sengana. Produces medium to high yields of dark red berries which have a very good flavour when fully ripe. King berries are large but size drops quickly for later fruit. Berries are medium firm and hull easily. Plants are susceptible to red stele (caused by the fungus *Phytophthora fragariae*) and green petal. Makes a jam with excellent flavour. Suited to Pick Your Own (PYO).

Cavendish Developed by Agriculture Canada in 1990, it is a cross between Glooscap and Annapolis, this variety produces high yields of very large, medium firm to firm fruit. Flavour is good but berries are prone to excessive darkening when overripe and colour can be variable with white blotches evident under some conditions. Plants show low to medium vigour, so planting densities should be increased. Resistant to red stele (A-6) but susceptible to powdery mildew and green petal. Suited to PYO or limited shipping.

Glooscap Developed by Agriculture Canada in 1983, it is a cross between Micmac and Bounty. Produces high yields of medium to large, dark red fruit. Berries are medium firm with good flavour. Plants are vigorous and winter hardy. Susceptible to red stele (A-6) and green petal. Suited to PYO. Symptoms resembling June Yellows have been observed.

Honeyoye Developed in 1972 by the New York State Agricultural Experiment Station, it is a cross between Vibrant and Holiday. Produces high yields of medium to large, attractive, medium firm berries which are prone to excessive darkening when overripe. Green tip may be observed, particularly on king berries. Honeyoye produces ample pollen and has some tolerance to tarnished plant bugs and thereby consistently develops well formed fruit. Fruit flavour is variable and can be quite acid on some sites. Plants are vigorous and they runner well.

Kent Developed by Agriculture Canada, it is a cross between Redgauntlet, Tioga and Raritan. Produces very high yields of large, bright red fruit. Berry flesh is firm but skin may be weak in hot weather. Flavour is fair to good. Has shown some tolerance to red stele (A-6) in some fields. Suited to PYO and limited shipping. Kent is the most widely grown strawberry variety in eastern Canada.

Toklat Developed in the 1960s by Arvo Kallio at the University of Alaska Experimental Station, it is a recommended perennial "June bearing" strawberry plant which are July-bearing in Fairbanks, Alaska for about two weeks. The strawberry will die if the temperature dips below -6.5°C, but a covering of snow will usually help insulate the plant. Other virtues of the perennial Toklat are its large size, firmness and pleasingly red hue. Toklats produce a lot of runners which, unless controlled, will limit fruit production.

Agriculture and Agri-Food Canada
Market & Industry Services Branch

Agriculture et Agroalimentaire Canada
Direction Générale des Services à l'Industrie et aux marchés

Yukon
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